

Total Suspended Solids (TSS) Checklist *

Based on NR 149 (1998), NR 219 (2004) and Standard Methods (18th, 19th and 20th Editions)

*This checklist is for the aid of the Department and the laboratory. It is only an audit guideline, it is not meant to establish regulatory standards or to dictate audit format. Laboratories must comply with all applicable rule and method requirements whether listed on this checklist or not. The general quality control and record requirements are covered on a separate QC and Records Checklist.

	Sample Storage and Pretreatment	Y	N	Notes	Citation
1	Are TSS samples stored at ≤ 6 °C until analyzed?				NR 219; Table F
2	Are samples analyzed within the hold time of 7 days?				NR 219; Table F
3	Is sample well stirred using a magnetic stirrer prior to analysis?				2540D; 3.c.

	Equipment	Y	N	Notes	Citation
4	Are glass fiber filter disks (without organic binder) approved brands or other products that give equivalent results?				2540 D; 2. 2540C; 2a.
5	Does the lab have an analytical balance capable of weighing to 0.1 mg?				2540 D; 2. 2540C; 2f.
6	Does the lab take steps to verify the accuracy of the analytical balance?				NR 149.14 (3)a.
7	Is a suitable desiccator with color indicating desiccant or an instrumental indicator used?				2540 D; 2. 2540C; 2d.
8	Is the drying oven capable of maintaining 103 - 105 °C?				2540 D; 2. 2540C; 2e.

	General Procedural Observations	Y	N	Notes	Citation
9	Is the fiber filter disk rinsed with three 20mL portions of reagent-grade water prior to drying?				2540D; 3.a.
10	Is the filter dried at 103-105°C for at least an hour, cooled in desiccator, and then weighed?				2540D; 3.a.
11	Is the filter re-dried and re-weighed until weight change is less than 4% of the previous weight, or 0.5 mg, whichever is less?				2540D; 3.a.
12	If filter is not re-dried is the filter dried overnight with a quarterly redry done to prove dryness is achieved?				Lab Cert Allowance
13	Is sample size appropriate to yield between 1.0 and 200 mg of residue?				Lab Cert Allowance 2540D; 3.b.
14	Is the sample filtered and then washed with at least three 10mL portions of reagent-grade water?				2540D; 3.c.
15	Are very large particles removed from the sample if it is deemed that they are not representative?				2540D; 1.b.
16	Is the filter with sample dried at 103-105°C for at least an hour, cooled in desiccator and then weighed?				2540D; 3.c.
17	Is sample re-dried and re-weighed until residue weight change is < 4% of the previous weight, or 0.5 mg, whichever is less?				2540D; 3.c.
18	If sample is not re-dried is it dried overnight with a quarterly redry done to prove dryness is achieved?				Lab Cert Allowance
19	Are calculations of suspended solids done correctly?				2540D; 4.